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(54) Title: NUCLEOSIDE DERIVATIVES AS INHIBITORS OF RNA-DEPENDENT RNA VIRAL POLYMERASE

(57) Abstract: The present invention provides nucleoside compounds and certain derivatives thereof which are inhibitors of RNA-dependent RNA viral polymerase. These compounds are inhibitors of RNA-dependent RNA viral replication and are useful for the treatment of RNA-dependent RNA viral infection. They are particularly useful as inhibitors of hepatitis C virus (HCV) NS5B polymerase, as inhibitors of HCV replication, and/or for the treatment of hepatitis C infection. The invention also describes pharmaceutical compositions containing such nucleoside compounds alone or in combination with other agents active against RNA-dependent RNA viral infection, in particular HCV infection. Also disclosed are methods of inhibiting RNA-dependent RNA polymerase, inhibiting RNA-dependent RNA viral replication, and/or treating RNA-dependent RNA viral infection with the nucleoside compounds of the present invention.

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US03/19172

A. CLASSIFICATION OF SUBJECT MATTER
IPC(7) : A61K 31/70; C07H 19/06, 19/10, 19/167, 19/20
US CL : 514/45-51; 536/26.23, 26.26, 26.7, 26.74, 26.9, 27.6-27.63, 27.7, 27.8, 27.81, 28.5-28.55
According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
U.S. : 514/45-51; 536/26.23, 26.26, 26.7, 26.74, 26.9, 27.6-27.63, 27.7, 27.8, 27.81, 28.5-28.55

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
HCA Plus structure search

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	DATABASE HCAPLUS, Chemical Abstracts, Vol. 139, Abstract No. 365176, HCA Plus Accession Number 2003:892793 (Columbus, Ohio, USA), WO 03/093290 A2 (GENELABS TECHNOLOGIES, INC.) 13 November 2003, HCA Plus Abstract supplied, see pages 3-4 of abstract.	1-16
X, P	WO 02/057287 A2 (MERCK & CO., INC.) 25 July 2002, see entire document.	1-16
X, P	WO 02/057425 A2 (MERCK & CO., INC.) 25 July 2002, see entire document.	1-16
X	WO 01/16379 A1 (MERCK & CO., INC.) 08 March 2001, see entire document.	1-16
X	LI ET AL. 2'-C-Branched Ribonucleotides. 2. Synthesis of 2'-C-beta-Trifluoromethyl Pyrimidine Ribonucleosides. Organic Letters. 08 March 2001, Vol. 3, Issue No. 7, pages 1025-1028, see entire document.	1, 7
X	DUNKEL ET AL. Synthesis of 2'-C-Difluoromethyl Substituted Nucleoside Analogs as Ribonucleoside Replacements in Hammerhead Ribozymes. Nucleosides & Nucleotides. 1995, Vol. 14, Issue Nos. 3-5, pages 799-801, see entire document.	1-3, 7

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